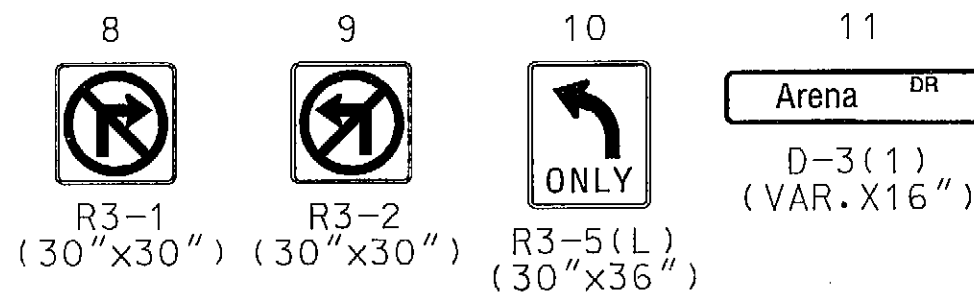


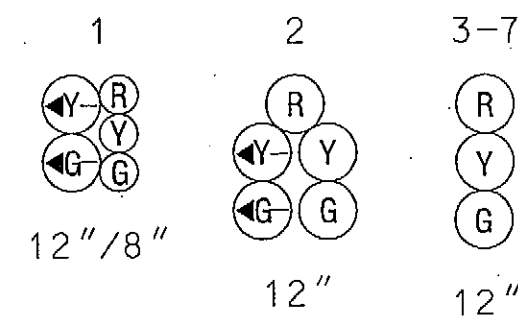
# PROPOSED VIDEO DETECTION CAMERA

a, b

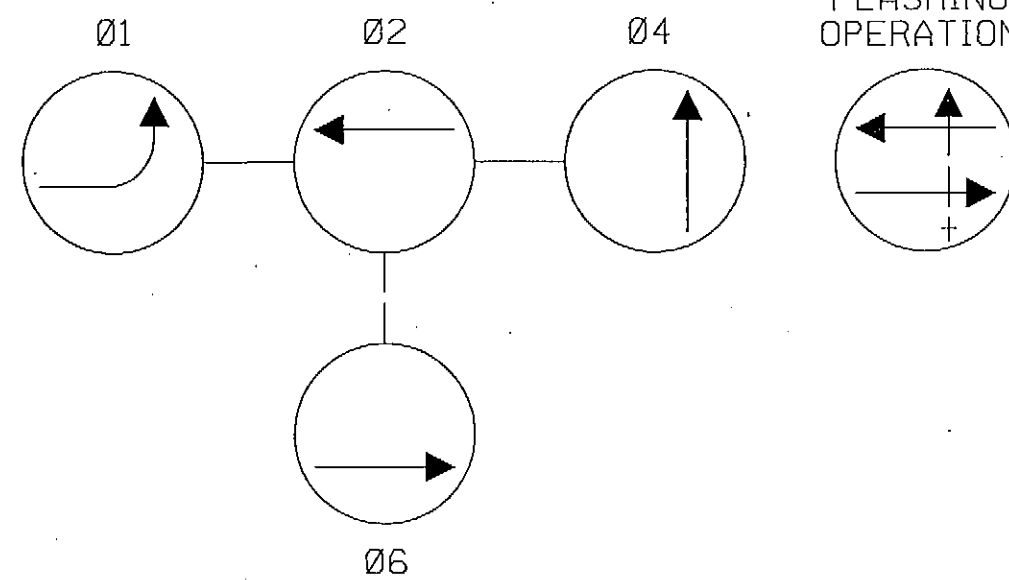
# PROPOSED SIGNS



# PROPOSED SIGNALS



# NEMA PHASING



# FLASHING OPERATION

NOTE:  
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

# SPECIAL NOTES:

- CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.

ARENA DRIVE IS ASSUMED TO RUN  
IN AN EAST-WEST DIRECTION

SHA RIGHT OF WAY

RIGHT OF WAY LINE

VIDEO ZONE  
DETECTION

a

FIBEROPTIC CABLE TO  
I 95/495 SB OFF RAMP

SHA RIGHT OF WAY

# CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 60 FT. MAST ARM. TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 38 FT. MAST ARM. TRAFFIC SIGNAL HEADS, SIGN, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 38 FT. MAST ARM. TRAFFIC SIGNAL HEADS, SIGN AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL NEMA SIZE "6" BASE MOUNTED CONTROLLER AND CABINET WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
- INSTALL EMBEDDED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
- INSTALL 6 FT. x 22 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE)
- INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- INSTALL 4 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - BORED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- INSTALL 4 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- REMOVE EXISTING MEDIAN AND INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. REPLACE 5 IN. CONCRETE MEDIAN.
- INSTALL HANDHOLE.
- REMOVE EXISTING MEDIAN AND INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. REPLACE 5 IN. CONCRETE MEDIAN.
- INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- USE EXISTING HANDHOLE. DISCONNECT AND PULL BACK EXISTING 6 FIBER MULTIMODE FIBEROPTIC CABLE HEADING EAST AND RE-FEED IN NEW CONDUIT TO PROPOSED BASE MOUNTED CABINET. CONTRACTOR SHALL CUT THE EXISTING 6 FIBER MULTIMODE FIBEROPTIC CABLE TO ALLOW FOR SUFFICIENT LENGTH OF CABLE TO BE RE-FEED TO NEW CABINET TO MAINTAIN COMMUNICATION CONNECTION TO SHOPPERS WAY TRAFFIC SIGNAL. REMOVE AND DISPOSE OF ALL UNUSED 6 FIBER MULTIMODE FIBEROPTIC CABLE.
- REMOVE EXISTING MEDIAN AND INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. REPLACE 4 IN. CONCRETE MEDIAN.
- REMOVE EXISTING HANDHOLE.
- CAP AND ABANDON EXISTING CONDUIT.
- INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE.
- INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - BORED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE.
- REMOVE EXISTING MEDIAN AND INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. REPLACE 5 IN. CONCRETE MEDIAN.

# GENERAL NOTES

- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
- FOR FINAL PAVEMENT MARKINGS REFER TO THE PAVEMENT MARKING PLANS. OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.

FIBEROPTIC CABLE  
TO SHOPPERS WAY

**SHA**

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
Arena Drive and I-95 Northbound Off-Ramp

# TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE AUGUST 23, 2007 CONTRACT NO. PG6385172

DESIGNED BY S. Bloss COUNTY PRINCE GEORGE'S

DRAWN BY S. Bloss LOGMILE

CHECKED BY N. Leany/T. Starn TIMS NO. 1023

FAP NO. AC-IM-95-3(177)N TOD NO.

TS NO. 4617 DRAWING TSP-5 OF 12 SHEET NO. 6 OF 13

GEOMETRIC LEGEND	
---	EXISTING
---	PROPOSED
UTILITY LEGEND	
SD	STORM DRAIN
G	GAS MAIN
V	WATER MAIN
S	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
F	TELEPHONE CABLES
F	FIBER-OPTIC

**WR&A**

Whitman, Reardon and Associates, LLP  
Engineers, Architects and Planners

801 South Caroline Street  
Baltimore, Maryland 21231  
410-235-3450

**THE LANE**

CONSTRUCTION CORPORATION

OVER 100 YEARS  
A Commitment to Excellence

# APPROVALS

APPROVED: *[Signature]* 8/29/07  
APPROVED: *[Signature]* 8/30/07  
APPROVED: *[Signature]* 9/4/07  
APPROVED: *[Signature]* 9/13

# REVISIONS

PLOTTED: 08-27-2007  
FILE: n:\31611-000\cad\p3g-P005\_arena.dgn

BY: jrasmusen